
Nomenclatural Corrections in Onagraceae

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ABSTRACT. In this paper, we provide corrections to a recent synoptical revision of the family Onagraceae (Wagner et al., 2007). The first valid publication of subfamily Onagroideae was in 1834 by Eaton, and not in 2007 by Wagner et al. We correct the authorship and place of publication of *Camissonia contorta* (Douglas) P. H. Raven, *Chylismia scapoidea* (Torrey & A. Gray) Nuttall ex Raimann, and *Camissonia chamaenerioides* (A. Gray) P. H. Raven. We correct the authorship and typification of *Oenothera suffulta* (Engelmann ex A. Gray) W. L. Wagner & Hoch, as well as the typification of *Chylismia claviformis* subsp. *lancifolia* (A. Heller) W. L. Wagner & Hoch. Our new genus *Holmgrenia* W. L. Wagner & Hoch is a later homonym of a name validly published by S. O. Lindberg in 1863. We propose the replacement name of *Neoholmgrenia* W. L. Wagner & Hoch to correct this problem, and make the two species-level combinations, *N. andina* (Nuttall) W. L. Wagner & Hoch, and *N. hilgardii* (Greene) W. L. Wagner & Hoch.

Key words: *Camissonia*, *Chylismia*, *Neoholmgrenia*, *Oenothera*, Onagraceae, Onagroideae.

Following the publication of our synoptical revision of the classification of Onagraceae (Wagner et al., 2007), we or others have noted several problems that we will correct here.

SUBFAMILY NAME

We published the name Onagraceae subfam. Onagroideae as new (Wagner et al., 2007: 41, 238) because we were not aware of any previous valid publication of this name. As we prepared our synopsis, we consulted Jim Reveal's website (<<http://www.plantsystematics.org/reveal/pbio/fam/sgindex.html>>, Reveal, 2003) because it represents the only compilation of suprageneric names available. Reveal listed the earliest publication for this subfamily as: "subfam. Onagroideae Lindley in Beilschmied,

Flora (Bieb.) 16(2): 58, 109. 14 Jun 1833 (Onagridae)." Our examination of copies of this publication in the libraries of MO and US revealed confusing discrepancies: the MO copy of *Flora* 16(2) does not include the Beilschmied article at all, whereas the US copy does, but with different pagination than that reported by Reveal (the relevant page in the US copy was p. 96, not 58). The MO library does, however, include another publication by Beilschmied from the same year, entitled *John Lindley's...Characteres distinctivi oder Hauptkennzeichen der natuerlichen Pflanzenfamilien* (reported in TL2: 4644), which is a verbatim copy of the *Flora* article as it appears in the US copy, albeit with different pagination. After careful examination of these publications with their conflicting paginations, however, we disagreed with Reveal, and concluded that Beilschmied, who was translating and extracting Lindley's (1830) *An Introduction to the Natural System of Botany* for a German-speaking audience, did not recognize subfamilies as such and did not substantively modify Lindley's treatment, which explicitly accepted de Candolle's (1828) tribal classification of Onagraceae. The only deviation from de Candolle adopted by Lindley was the recognition of Circaeaceae as a separate family, a classification also followed by Beilschmied.

On his website, Reveal also reported two other possibly relevant subfamilial names: subfamily Oenotheroideae Kosteletsky (Kosteletsky, 1835, as Oenotheraeae), and subfamily Circaeoideae Kosteletsky (Kosteletsky, 1835, as Circaeaeae). In this instance, we again disagree with Reveal's interpretation. Kosteletsky, like Lindley and many other authors of that period, adopted de Candolle's classification of Onagraceae with five tribes, using the same tribal Latin endings (McNeill et al., 2006), with only minor changes: Kosteletsky called his taxa Gruppen, and changed one from de Candolle's Onagreae to Oenotheraeae. We find no direct evidence that Kosteletsky intended to change these Candollean tribes into subfamilies.

Discussion with Reveal (pers. comm. in 2007 after publication of our synopsis) revealed other valid publications of subfamily Onagroideae prior to our synopsis in 2007, the earliest of which appears to be:

Onagraceae subfam. **Onagroideae** Eaton, Bot. Dict., ed. 4: 44. 1836. TYPE: *Onagra* Miller [= *Oenothera* L.].

ATTRIBUTION OF SPECIES NAMES

In his revision of *Camissonia* Link, Raven (1969) considered the new combination bringing *Oenothera contorta* Douglas into *Camissonia* to have been made by Kearney (in Britton & Kearney, 1894: 37), and we (Wagner et al., 2007: 122) repeated this information in citation. Our subsequent examination of Britton and Kearney's publication shows that Kearney did not validly make this combination, since he provided only an unranked trinomial *Chamissonia contorta pubens* based on *Oenothera contorta pubens*. Therefore, the next available and correct author and place of publication is Raven (1969), with the name appropriately attributed as *C. contorta* (Douglas) P. H. Raven.

Similarly, we listed Small (1896) as the author of the combination *Chylismia scapoidea*, following Raven (1962, 1969); however, this combination was originally made three years earlier in Raimann (1893). The correct author and place of publication is Raimann (1893: 217). The name should be appropriately attributed as *C. scapoidea* (Torrey & A. Gray) Nuttall ex Raimann in Wagner et al. (2007: 133, 136).

We inadvertently overlooked a correction in Raven (1982) relevant to the first valid publication of the combination *Camissonia chamaenerioides* (A. Gray) P. H. Raven. The correct place of publication is Raven (1982). The name is referred to *Eremothera chamaenerioides* (A. Gray) W. L. Wagner & Hoch, in Wagner et al. (2007: 127, 209).

TYPE DESIGNATIONS

We incorrectly selected a lectotype for *Chylismia lancifolia*, when in fact the holotype still exists, as pointed out to us by A. G. Tiehm (pers. comm.) after our synopsis appeared. Kerry Barringer kindly verified that the holotype is indeed extant in BKL. We also incorrectly typified *Oenothera suffulta* and misstated the authorship of this name, which was brought to our attention by Jim Zarucchi and Kanchi Gandhi. The corrections are as follows:

Chylismia claviformis subsp. **lancifolia** (A. Heller) W. L. Wagner & Hoch, Syst. Bot. Monogr. 83: 206. 2007. Basionym: *Chylismia lancifolia* A.

Heller, Muhlenbergia 2: 226. 1906. *Oenothera claviformis* subsp. *lancifolia* (A. Heller) P. H. Raven, Univ. Calif. Publ. Bot. 34: 109. 1962. *Camissonia claviformis* subsp. *lancifolia* (A. Heller) P. H. Raven, Brittonia 16: 282. 1964. TYPE: U.S.A. California: Inyo Co., base of White Mtns. E of Laws, 11 May 1906, A. Heller 8231 (holotype, BKL not seen; isotypes, CAS, COLO, DS not seen, MO, NY, UC not seen, US).

Oenothera suffulta (Engelmann ex A. Gray) W. L. Wagner & Hoch, Syst. Bot. Monogr. 83: 214. 2007. Basionym: *Gaura suffulta* Engelmann ex A. Gray, Bost. J. Nat. Hist. 6: 190. 1850. TYPE: U.S.A. Texas: Comal Co., New Braunfels, May 1847, F. Lindheimer 611 (lectotype, designated by Raven & Gregory, 1972 [1973]: 80, GH not seen; duplicates [isolectotypes], BM not seen, F not seen, GH [3], LE not seen, M not seen, MO [3], NY, PH not seen, US).

NEW GENERIC NAME

When we published the new genus *Holmgrenia* W. L. Wagner & Hoch, we were unaware of an earlier name *Holmgrenia* Lindberg (Lindberg, 1862), published for a genus of bryophytes that is now known by the conserved name *Orthothecium* Schimper (in Bruch et al., 1851). We here propose a new name for the western North American genus in Onagraceae, and make the two necessary species-level combinations.

Neoholmgrenia W. L. Wagner & Hoch, nom. nov. *Holmgrenia* W. L. Wagner & Hoch, Syst. Bot. Monogr. 83: 127. 2007, nom. illeg., non *Holmgrenia* Lindberg, 1863. TYPE: *Neoholmgrenia hilgardii* (Greene) W. L. Wagner & Hoch.

Camissonia sect. *Nematocaulis* P. H. Raven, Brittonia 16: 285. 1964. *Oenothera* sect. *Nematocaulis* (P. H. Raven) Munz, N. Amer. Fl., ser. 2, 5: 155. 1965. TYPE: *Oenothera hilgardii* Greene [= *Neoholmgrenia hilgardii* (Greene) W. L. Wagner & Hoch].

Neoholmgrenia andina (Nuttall) W. L. Wagner & Hoch, comb. nov. Basionym: *Oenothera andina* Nuttall, in Torrey & A. Gray, Fl. N. Amer. 1: 512. 1840. *Sphaerostigma andinum* (Nuttall) Walpers, Repert. Bot. Syst. 2: 79. 1843. *Camissonia andina* (Nuttall) P. H. Raven, Brittonia 16: 285. 1964. *Holmgrenia andina* (Nuttall) W. L. Wagner & Hoch, Syst. Bot. Monogr. 83: 210. 2007, nom. illeg. TYPE: U.S.A. Idaho: Bingham or Caribou Co., dry plains near the Blackfoot River, 10–12 July 1834, T. Nuttall s.n. (holotype, BM not seen; isotypes, GH, K, NY, PH not seen).

Neoholmgrenia hilgardii (Greene) W. L. Wagner & Hoch, comb. nov. Basionym: *Oenothera hilgardii* Greene, Bull. Torrey Bot. Club 10: 41. 1883. *Sphaerostigma hilgardii* (Greene) Small, Bull. Torrey Bot. Club 23: 188. 1896. *Sphaerostigma andinum* var. *hilgardii* (Greene) A. Nelson, Bot. Gaz. (Crawfordsville) 40: 56. 1905. *Oenothera andina* var. *hilgardii* (Greene) Munz, Bot. Gaz. 85: 251. 1928. *Camissonia hilgardii* (Greene) P. H. Raven, Brittonia 16: 285. 1964. *Holmgrenia hilgardii* (Greene) W. L. Wagner & Hoch, Syst. Bot. Monogr. 83: 210. 2007, nom. illeg. TYPE: U.S.A. Washington: Klickitat or Yakima Co., moist alkaline soil of the Klickitat Swale, July 1882, *E. Hilgard s.n.* (holotype, GH).

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